STATE OF NEW HAMPSHIRE
Department of Environmental Services
Air Resources Division

Title V Operating Permit

Permit No: **TV-OP-031 Reopened and Reissued October 19, 2001**
Date Issued: **September 28, 2000**

This certifies that:
Indeck Energy - Alexandria, LLC
151 Smith River Road
Alexandria, NH 03222

has been granted a Title V Operating Permit for the following facility and location:
Indeck Energy - Alexandria, LLC
151 Smith River Road
Alexandria, NH 03222
Grafton County
AFS No. 3300900029

This Title V Operating Permit is hereby issued pursuant to RSA 125-C and Part Env-A 609. This permit has been prepared based on information specified in the Title V Operating Permit Application filed with the New Hampshire Department of Environmental Services, Air Resources Division (DES) on **January 13, 1998 and** the supplemental information for the Title V application received on **January 18, 2000** under the signature of the following responsible official certifying to the best of their knowledge that the statements and information therein are true, accurate and complete.

Responsible Official:
Bruce Spencer
Plant Manager
Indeck Energy - Alexandria, LLC
(603) 744-6355

Technical Contact:
Jim Schneider
Senior Environmental Engineer
Indeck Energy Services, Inc.
(847) 520-3212

This Permit is issued by the DES pursuant to its authority under New Hampshire RSA 125-C and in accordance with the provisions of Code of the Federal Regulations 40 Part 70.

This Title V Operating Permit shall expire on **September 30, 2005**.

SEE ATTACHED SHEETS FOR ADDITIONAL PERMIT CONDITIONS

For the New Hampshire Department of Environmental Services, Air Resource Division

Director, Air Resources Division

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Facility Specific Title V Operating Permit Conditions

I. Facility Description of Operations:

Indeck Energy - Alexandria, LLC (Indeck Energy) is located on Smith River Road in Alexandria, New Hampshire. The electric generating station is designed to consume wood fuel consisting of sawmill residue and/or whole tree chips and "processed wood chip" fuel derived from construction/demolition (C/D) waste wood chips to generate 16 MW (gross) of electrical power. No. 2 fuel oil and specification used oil are also used as alternative fuels for light off and flame stabilization.

II. Permitted Activities:

In accordance with all of the provisions of the New Hampshire Rules Governing the Control of Air Pollution (effective date 12/31/96) and as revised thereafter, the permittee is authorized to operate the devices and or processes identified in Sections III., IV., V., and VI. within the terms and conditions specified in this Permit.

Indeck Energy must also obtain a permit from the Department of Environmental Services, Waste Management Division for storage and handling of the C/D waste wood chips. Hence, Indeck Energy can not accept shipments of this material or begin burning this material until it has received its final Solid Waste Management Facility Permit.

III. Significant Activities Identification and Stack Criteria:

A. Significant Activity Identification

The activities identified in the following table (Table 1) are subject to and regulated by this Title V Operating Permit:

Table 1 - Significant Activity Identification

Emission Unit Number (EU#)	Description of Emission Unit	Exhaust Stack Identification	Emissions Unit Maximum Design Capacity
EU1 - Boiler	Zurn Wood-fired Boiler with a Zurn Model SAO-24 Burner	Stack #1	Maximum Firing Rate of 250 mmBTU/hr gross heat input derived from a mixture of sawmill residue and/or whole tree chips blended with C/D waste wood chips. Max Firing Rate of 50 mmBTU/hr gross heat input derived from any combination of No. 2 fuel oil or specification used oil.
EU2 -Cooling Tower	Circulation Water Cooling Tower	Cooling Tower	Drift Factor = 0.00005 gal drift/gal circ Circulation Rate = 11,600 gpm
			269 Hp operating less than 500

Table 1 - Significant Activity Identification			
EU3 - EG	Cummins Emergency Diesel Generator	Stack #2	hours operation in any consecutive 12 month period; maximum fuel firing rate of 13 gal/hour and max firing rate of 1.8 mmBTU/hr

1. Based on facility operations, fuel fed to the Boiler shall consist of any of the following:

   a. Whole tree wood chips at approximately 50% moisture (approximately 9.0 mmBTU/ton wet basis);

   b. Clean processed wood fuel[1] (approximately 17.4 mmBTU/ton dry basis for "processed wood chips" derived from C/D wood waste);

   c. Clean processed wood fuel and whole tree wood chips at approximately 50% moisture;

   d. Clean processed wood fuel and/or whole tree wood chips and specification used oil at a maximum of 1.2% sulfur by weight or No. 2 fuel oil at maximum of 0.4% sulfur by weight; or

   e. Specification used oil with a maximum of 1.2% sulfur by weight or No. 2 fuel oil with a maximum of 0.4% sulfur by weight - for startup and flame stabilization.

See the State-only and Federally Enforceable Operational and Emissions Limitations found in Sections VIII.A. and VIII.B. for limits on the amounts of the individual types of fuel fed to the Boiler.

B. Stack Criteria

The following stacks for the above listed significant devices at this facility shall discharge vertically without obstruction (including rain caps) and meet the following criteria in accordance with the state-only air pollution dispersion modeling requirements specified in Env-A 606.

Table 2 - Stack Criteria

Stack #	Minimum Stack Height (Feet)	Maximum Stack Diameter (Feet)
Stack #1 - EU1-(Boiler)	150	5.0
Stack #2 - EU3-Emergency	9	0.3

[1] Clean processed wood fuel is considered to be fuel that exhibits fuel characteristics equivalent to "whole tree wood chips" and "sawdust" with respect to the ultimate and proximate analysis of the fuel.

Table 2 - Stack Criteria		
Generator (EG)		

Preauthorized changes to the state-only requirements pertaining to stack parameters (set forth in this permit) shall be permitted only when an air quality impact analysis meeting the criteria of Part Env-A 606 is performed either by the facility or by the DES (if requested by the facility in writing) in accordance with the "NHARD Policy and Procedure for Air Quality Impact Modeling". All air modeling data shall be kept on file at the facility for review by the DES upon request.

IV. Insignificant Activities Identification:

All activities at this facility that meet the criteria identified in the New Hampshire Rules Governing the Control of Air Pollution Part Env-A 609.03(g), shall be considered insignificant activities. Emissions from the insignificant activities shall be included in the total facility emissions for the emission-based fee calculation described in Section XXIII. of this Title V Operating Permit.

V. Exempt Activities Identification:

All activities identified in the New Hampshire Rules Governing the Control of Air Pollution Part Env-A 609.03(c) shall be considered exempt activities and shall not be subject to or regulated by this Title V Operating Permit.

VI. Pollution Control Equipment Identification:

The devices and/or processes identified in Table 3 below are considered pollution control equipment for the identified emissions unit.

Table 3 - Pollution Control Equipment Identification

Pollution Control Equipment Number (PC#)	Description of Equipment	EU#
PC1-Multiclone	Multiclone - primary particulate control for the EU1 - Boiler	EU1-Boiler
PC2-ESP	Electrostatic Precipitator (ESP) - secondary particulate control for the EU1 - Boiler	EU1-Boiler

A. All equipment, facilities and systems installed and used to achieve compliance with the terms and conditions of this permit shall at all times be maintained in good working order and shall be operated as efficiently as possible so as to minimize air pollutant emissions and meet all applicable air pollutant emission limits. These controls shall be fully operational upon facility startup and shall not be bypassed during startup, operation, or shutdown of the steam generating unit.

B. The pollution control equipment shall be maintained regularly, in accordance with the manufacturer's Operation and Maintenance (O&M) manual and monitored based on the schedules as described in Section VIII.D.

C. The Multiclone shall be operated in series at all times with the ESP unit while the Boiler is in operation.

VII. Alternative Operating Scenarios:

Indeck Energy did not propose any alternative operating scenarios.

VIII. Applicable Requirements:

A. State-only Enforceable Operational and Emissions Limitations:

Indeck Energy shall be subject to the state-only operational and emission limitations identified in Table 4 below:

Table 4 - State-only Enforceable Operational and Emission Limitations

Item #	Regulatory Cite	Applicable Emission Unit	Applicable Requirement
1.	Env-Wm 403	Boiler	The used oil burned in the Boiler as an auxiliary fuel shall not exhibit any of the hazardous waste characteristics specified in Env-Wm 403.
2.	Env-Wm 807.02(b)	Boiler	The used oil must be below the following maximum allowable concentrations in order to be combusted in the Boiler: Maximum Allowable Concentrations in Used Oil: arsenic 5.0 ppm maximum cadmium 2.0 ppm maximum chromium 10.0 ppm maximum lead[2] 60.0 ppm maximum total halogens 1000.0 ppm maximum PCB's < 2 ppm sulfur 1.6 lbs/mmBtu, 1.2% sulfur by weight flash point 100 deg. F minimum Used oil which does not meet the specifications above for on-spec used oil shall not be burned in the Boiler. Indeck Energy must contact the New Hampshire Department of Environmental Services Waste Management Division for alternative options.
3.	Env-Wm 807.06 Env-Wm 807.10	Boiler	The New Hampshire Department of Environmental Services Waste Management Division and U.S. Environmental Protection Agency must be notified and compliance achieved pursuant to Part Env-Wm 807.06 Standards for Generator's of Used-Oil Being Recycled and Part Env-Wm 807.10 Standards for Burners of Used-Oil Fuel.
4.	Env-A 1002.03	Facility Wide	Indeck Energy shall take precautions to prevent, abate, and control the emissions of fugitive dust for those activities contained in Env-A 1002.02. Such precautions shall include wetting, covering, shielding, or vacuuming.
5.	Env-A 305	Boiler	To operationally control CO emissions in accordance with Env-A 305, Indeck shall comply with the following operational limitations: Indeck shall control CO emissions by varying the total quantity of input combustion air and/or the local distribution of that air into the Boiler. The amount of combustion air required to optimize the Boiler efficiency and reduce CO emissions is dependent on the wood moisture content and the type of wood, among other factors. The steam generating unit shall be equipped with a fuel

[2] The limit for lead is 60 ppm due to modeling violations predicted with the 100 ppm level allowed in the specification used oil criteria in the DES Waste Management Rules.

Table 4 - State-only Enforceable Operational and Emission Limitations

			distribution, overfire air and undergrate air control systems for optimum NO_x, CO, and hydrocarbon emission control.
6.	Env-A 1305.01(a)	Facility Wide	New or modified devices, new or modified area sources, and existing devices or area sources for which new applications for permits are filed that have the potential to emit, in any amount, substances that meet the criteria of Env-A 1301 shall be subject to Env-A 1300, until such time as the Env-A 1400 requirements supersede the Env-A 1300 requirements. (As outlined below)
7.	Env-A 1305.02	Facility Wide	Air quality impact analysis of devices and area sources emitting substances meeting the criteria of Env-A 1301 shall be performed in accordance with the "DES Policy and Procedure for Air Quality Impact Modeling" or other comparable dispersion modeling methods approved by EPA.
8.	Env-A 1403.01	Facility Wide	In accordance with Env-A 1403.01, new or modified devices or processes installed after May 8, 1998, shall be subject to the requirements of Env-A 1400.
9.	Env-A 1403.02(a)	Facility Wide	In accordance with 1403.02(a), all existing unmodified devices or processes which are in operation during the transition period ending three years from May 8, 1998 (May 8, 2001), shall comply with either Env-A 1300 or Env-A 1400.
10.	Env-A 1403.02(b)	Facility Wide	In accordance with Env-A 1403.02(b), all existing devices or processes in operation after the transition period ending three years from May 8, 1998 (May 8, 2001), shall comply with Env-A 1400. Env-A 1300 will no longer be in effect.
11.	Env-A 1404.01(d)	Facility Wide	In accordance with Env-A 1404.01(d), documentation for the demonstration of compliance shall be retained at the site, and shall be made available to the DES for inspection.
12.	Env-A 1405.02	Facility Wide	In accordance with Env-A 1405.02 the owner of an existing device or process requiring a permit modification under chapter Env-A 1400 shall submit to the DES no later than one year prior to the end of the transition period (May 8, 2000), an application for a modification to a title V permit in accordance with Env-A 609.18, and a request to the DES to perform air dispersion modeling.
13.	Env-A 1405.03	Facility Wide	In accordance with Env-A 1405.03 the owner of an existing device or process requiring a permit under Env-A 1300 shall submit to the DES no later than one year prior to the end of the transition period (May 8, 2000), a compliance plan identifying how the device or process will comply with chapter Env-A 1400 by the end of the transition period. The compliance plan shall contain the dates when the information required in Env-A 1405.02 will be filed with the DES.
14.	Env-A 1406.01	Facility Wide	In accordance with Env-A 1406.01 the owner of any device or process which emits a regulated toxic air pollutant shall determine compliance with the ambient air limits by using one of the methods provided in Env-A 1406.02, Env-A 1406.03, or Env-A 1406.04. Upon request, the owner of any device or process which emits a regulated toxic air pollutant shall provide documentation of compliance with the ambient air limits to the DES.
15.	Env-A 2003.04(d)	Boiler	Exceedances of the opacity standard shall not be considered violations of this part if the facility demonstrates to the division that such exceedances were the result of the adherence to good boiler operating practices which, in the long term, results in the most efficient or safe operation of the boiler.
16.	Env-A	Boiler	Opacity exceedances experienced during periods of cold startup of a boiler over

Table 4 - State-only Enforceable Operational and Emission Limitations			
	2003.04(e)(2)		a continuous period of time resulting in efficient heat-up and stabilization of its operation and the expeditious achievement of normal operation of the unit shall not be considered violations.
17.	Env-A 2003.04(f)	Boiler	Exceedances of the opacity standard shall not be considered violations of this part if the source demonstrates to the DES that such exceedances were the result of the occurrence of an unplanned incident in which the opacity exceedance was beyond the control of the operator and in response to such an incident, the operator took appropriate steps in conformance with good boiler operating practice to eliminate the excess opacity as quickly as possible.

18. Compliance Demonstration Requirements for the EU2 - Cooling Tower - State-only Enforceable

a. In accordance with Env-A 1400, prior to changing cooling water treatment chemicals, Indeck shall evaluate the impact of the proposed chemicals on the 24-hour and annual de minimus limits of the DES Air Toxics List. If the impact exceeds the de minimus 24-hour or annual levels, Indeck shall notify the DES in writing of the proposed chemical changes. Written approval from the DES shall be received prior to making the chemical change if the de minimus levels are exceeded. If the impact does not exceed the de minimus levels, Indeck may make the chemical change and shall keep the records of the impact analysis in the facility files in accordance with the Record keeping requirements of Section X.D. of this permit.

b. The following equations shall be used to evaluate the impact of cooling water chemicals on the 24-hour and annual de minimus levels. This equation shall be used for each chemical used in the cooling water that is included on the DES Air Toxics List. Also, this equation shall be used to estimate particulate emissions from both chemical additives to the water and total dissolved solids contained in the water for emission-based fees as described in Section XXV. of this permit.

24-hour Emissions (lb/hr) = (DR)*(Hourly CR)*(8.34 lb/gal)*(C)

Example Calculation: 24-hour emissions of total dissolved solids (TDS) in (lb/hr)

$$= \frac{(0.00005\ \text{gal/gal})*(696{,}000\ \text{gal/hr})*(8.34\ \text{lb/gal})*(1200\ \text{ppmw TDS})}{1x10^{6}}$$

= 0.35 lb/hr TDS

Annualized Emissions (lb/yr) = (24-hour Emissions, lb/hr)*(Operating hours/year)

Example Calculation: Annualized emissions of TDS (lb/yr) = (0.35 lb/hr)*(8760 hrs/yr)
= 3,051 lbs/yr TDS

Where: DR = drift rate for cooling tower (based on manufacturer's data for facility cooling tower), gal drift/gal circulation water (0.00005 gal/gal)
Hourly CR = water circulation rate, gal/hr
C = concentration of chemical of interest (or total dissolved solids concentration) in circulation water, ppmw (use maximum potential concentration for de minimus impact evaluation and average or actual data for emission-based fee calculations).

VIII. Applicable Requirements:

B. Federally Enforceable Operational and Emissions Limitations:

The Permittee shall be subject to the federally enforceable operational and emission limitations identified in Table 5 below:

Table 5 - Federally Enforceable Operational and Emission Limitations

Item #	Regulatory Cite	Applicable Emission Unit	Applicable Requirement
1.	40 CFR 60 Subpart Db §60.44b(c), RSA 125-C:6, RSA 125-C:11, & Env-A 606.04	Boiler	To allow for an exemption of Indeck from the NO_x emission limitation in 40 CFR 60, Subpart Db, and to satisfy the DES modeling requirements, the maximum consumption of No. 2 fuel oil and specification used oil, at maximum 0.4% and 1.2%sulfur by weight, respectively, combined by the Boiler shall be limited to 1,080,000 gallons during any consecutive 12-month period with no more than 90,000 gallons during any consecutive 30-day period with a nitrogen content of 0.30 weight percent or less (equivalent to 12,600 mmBtu during any consecutive 30-day period). The maximum gross heat input rate of No. 2 fuel oil or specification used oil at a maximum of 0.4% and 1.2% sulfur by weight, respectively, to the Boiler shall be limited to 50 mmBtu/hr. This is equivalent to 367 gallons per hour on an annual average of No. 2 fuel oil or specification used oil based on a heating value of 140,000 BTUs/gallon. Also, Indeck shall not exceed 3,000 gallons of these fuels in any consecutive 24-hour period.
2.	RSA 125-C:6, RSA 125-C:11, & Env-A 606.04	Boiler	Based on equipment design, the maximum operating rate of the Boiler shall be limited to a total of 250 million BTU per hour (mmBtu/hr) gross heat input. This is the equivalent of 161,000 pounds per hour (lbs/hr) of steam production as averaged over any consecutive 24-hour period at 850 degrees F and 925 PSIG, assuming a boiler efficiency of 70% and boiler feedwater temperature of 430 degrees F. Based on the equipment design, the maximum gross heat input rate of any combination of No. 2 fuel oil and specification used oil to the Boiler shall be limited to 50 mmBtu/hr during all phases of operation, including startup. Based on DES modeling results, Indeck shall not use more than 3,000 gallons of No. 2 fuel oil or specification used oil in any consecutive 24-hour period. Also, Indeck shall not exceed 367 gal/hr of these fuels for more than eight consecutive hours. These limits are applicable during all phases of operation, including startup. Based on the DES modeling results, the maximum monthly gross heat input rate of any combination of No. 2 fuel oil and used specification oil to the Boiler shall be limited to 12,600 mmBtu during any consecutive 30-day period. This is equivalent to a total of 90,000 gallons during any consecutive 30-day period based on 140,000 BTU/gal. Since these modeling limits are less than the 10% limit of 40 CFR 60, Subpart Db, an exemption of Indeck from the NO_x emission limitation found in 40 CFR 60, Subpart Db will be allowed.
3.	RSA 125-C:6, RSA 125-C:11, & Env-A 606.04	Boiler	Based on equipment design, operating 365 operating days per year, and air dispersion modeling limiting C/D derived wood chips to less than or equal to 75% of the total heat input when using a blend of sawmill residue/whole tree wood chips and C/D derived chips, Indeck Energy shall be limited to a maximum

Table 5 - Federally Enforceable Operational and Emission Limitations

			of 94,397 bone dry tons C/D derived chips during any consecutive 12 month period. In addition, Indeck Energy shall limit the use of C/D derived chips such that the total heat input rate derived from such source is less than or equal to 75% of the total heat input rate derived from all C/D derived wood chips plus whole tree chips/sawmill residue during any consecutive 12 month period. For compliance demonstration requirements, see Monitoring/Testing Requirements listed in Section VIII.D.
4.	Env-A 1211.02(j)(1) & Env-A 1211.02(j)(2)	EG	The emergency generator shall be limited to less than 500 hours of operation during any consecutive 12-month period, and the combined theoretical potential emissions of NO_x from all such generators are limited to less than 25 tons for any consecutive 12-month period.
5.	Env-A 1211.04(d) & Env-A 1211.05(d)(5)	Boiler	The Boiler, firing wood fuel or capable of firing a combination of wood fuel and oil and equipped with a traveling grate, shall comply with the oxides of nitrogen (NO_x) Reasonably Available Control Technology (RACT) emission limit of 0.33 pounds per million BTU (lb/mmBtu), based on a 24-hour calendar day average.
6.	Env-A 1604.01(a)	Facility Wide	The sulfur content of No. 2 oil, off-road diesel oil, and used oil burned at this facility shall not exceed 0.40 percent sulfur by weight.
7.	Env-A 2003.02 & 40 CFR 60 Subpart Db §60.43b(f)	Boiler	In accordance with Env-A 2003.02 and 40 CFR Part 60, Subpart Db, Indeck Energy shall not cause or allow average opacity from fuel burning devices installed after May 13, 1970 in excess of 20 percent for any continuous 6-minute period in any 60-minute period. The Boiler may apply no more than one of the following exemptions in accordance with Env-A 2003.04(a): a. During periods of startup, shutdown, and malfunction, average opacity shall be allowed to be in excess of 20 percent for one period of 6 continuous minutes in any 60-minute period; **or** b. During periods of normal operation, soot blowing, grate cleaning, and cleaning of fires, average opacity shall be allowed to be in excess of 20 percent, but not more than 27 percent, for one period of 6 continuous minutes in any 60-minute period.
8.	40 CFR 52.21(b)(1)(i)(*b*)	Facility Wide	To avoid the requirements of the federal Prevention of Significant Deterioration (PSD) regulation 40 CFR 52.21(b)(1)(i)(*b*), the combined NO_x emission rate for the facility fuel burning devices shall be limited to 57.0 pounds per hour (lbs/hr) average for any consecutive 365-day period.
9.	40 CFR 52.21(b)(1)(i)(*b*)	Facility Wide	To avoid the requirements of the federal Prevention of Significant Deterioration (PSD) regulation 40 CFR 52.21(b)(1)(i)(*b*), the combined CO emission rate for the facility fuel burning devices shall be limited to 57.0 pounds per hour (lbs/hr) average for any consecutive 365-day period.
10.	RSA 125-C:6, RSA 125-C:11, and Env-A 606.04	Boiler	The carbon monoxide (CO) emission rate for the Boiler shall be limited to 125 lbs/hr for each calendar day average, as calculated on the CEM system or using the calculation shown in Section VIII.D., Item 6. of this permit.
11.	40 CFR 60 Subpart Db §60.43b(c)(1)	Boiler	The PM emission rate for the Boiler shall be limited to 0.10 lb/mmBtu heat input.

VIII. C. Emission Reductions Trading Requirements

The Permittee did not request emissions reductions trading in its operating permit application. At this point, DES has not included any permit terms authorizing emissions trading in this permit. All emission reductions trading, must be authorized under the applicable requirements of either Env-A 3000 (the "Emissions Reductions Credits (or ERCs) Trading Program") or Env-A 3100 (the "Discrete Emissions Reductions (or DERs) Trading Program") and 42 U.S.C. §7401 et seq. (The "Act"), and must be provided for in this Permit.

VIII. D. Monitoring/Testing Requirements

The Permittee is subject to the monitoring/ testing requirements as contained in Table 6 below:

Table 6 - Monitoring/Testing Requirements

Item #	Control Device	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
1.	Boiler	Initial Performance Test	(1) As a condition of this permit, Indeck Energy shall conduct USEPA method stack tests at maximum load conditions while burning 75% C/D wood chips and 25% whole tree chips for the following pollutants: a. NOx b. PM10 c. CO d. Non-methane VOC's e. As, Cd, Cr, Pb, Mn, Hg, Zn (2) The compliance tests shall be conducted and the results reported in accordance with the test methods set forth in 40 CFR 60, Subpart A, Section 60.8 and Appendix A. The following test methods or DES approved alternatives shall be used: a. Method 1 and 2, to determine the exit velocity of stack gases from stationary sources. b. Method 3 or 3A, to determine carbon dioxide, oxygen, excess air, and molecular weight (dry basis) of stack gases from stationary sources. c. Method 4, to determine moisture content (volume fraction of water vapor) of stack gases from stationary sources. d. Method 5, to determine particulate emissions from stationary sources. e. Method 7E, to determine nitrogen oxide emissions from stationary sources (Instrumental Analyzer Procedure). f. Method 9, for visual determination of the opacity of emissions from stationary sources. g. Method 10, to determine carbon monoxide emissions from stationary sources or an alternative method approved by the DES in advance. h. Method 25 or 25A or 25B, 40 CFR 60, Appendix A, to determine non-methane organic concentrations in emissions from stationary sources. i. Method 29, 40 CFR 60, Appendix A, to determine As, Cd, Cr, Pb, Mn, Hg, and Zn concentrations in emissions from stationary sources.	Once, within 60 days after achieving the maximum production rate, but not later than 180 days after initial startup of the affected emissions unit and at other times upon request by the DES or EPA	Env-A 802 Federally Enforceable

Table 6 - Monitoring/Testing Requirements					
1.	Boiler	Initial Performance Test (Continued)	(3) At least 30 days prior to the commencement of testing, a pretest report presenting the following information shall be submitted to the DES: a. Calibration methods and sample data sheets; b. Test methods to be used; c. Pre-test preparation procedures; d. Sample collection and analysis methods; e. Process data to be taken during the tests and frequency of data collection; and f. A complete test program description. (4) At least 15 days prior to commencement of testing, Indeck Energy and any contractor that Indeck Energy may retain for testing, shall participate in a pretest conference with a DES representative. (5) Within 30 days after completion of testing, Indeck Energy shall submit a test report to the DES. (6) Emission testing shall be observed by a DES representative. (7) Any compliance test results, determined following 40 CFR 60, Subpart A, Section 60.8, which show exceedances of any emission limits stated in this permit shall be violations.	Once, within 60 days after achieving the maximum production rate, but not later than 180 days after initial startup of the affected emissions unit and at other times upon request by the DES or EPA	Env-A 802 Federally Enforceable
2.	Facility Stacks and Boiler	Allows for adequate dispersion of HAPs and other regulated pollutants	Conduct an annual inspection of each stack and fuel burning device. Inspections shall include documenting any leaks, holes, rusting and/or disrepair of stacks, and the manufacturer's recommended periodic physical, mechanical, and electrical system checks for the fuel burning equipment. Records of inspections and subsequent maintenance conducted as a result of the annual inspections shall be kept on file at the Facility for review by the DES and/or EPA upon request.	Annually	40 CFR 70.6(a)(3) Federally Enforceable
3.	Boiler	Used Oil Analysis	Indeck Energy shall require all suppliers of used oil to provide with each delivery, a fuel analysis certifying compliance with Env-Wm 807.02 (Maximum Allowable Concentrations in Used Oil, listed below) and the sulfur content limit of 1.2 percent by weight. This data shall be retained by the facility in accordance with record keeping requirements described in Section VIII.E. and reported in accordance with Section VIII.F. of this permit. The used oil must be below the following maximum allowable concentrations in order to be burned in the Boiler:	Prior to burning any load of used oil in the Boiler	Env-Wm 807.02(b)

[3] The limit for lead is 60 ppm due to modeling violations predicted with the 100 ppm level allowed in the specification used oil criteria in the DES Waste Management Rules.

Table 6 - Monitoring/Testing Requirements					
			Maximum Allowable Concentrations in Used Oil: arsenic 5.0 ppm maximum cadmium 2.0 ppm maximum chromium 10.0 ppm maximum lead[3] 60.0 ppm maximum total halogens 1000.0 ppm maximum PCB's < 2 ppm sulfur 1.6 lbs/mmBtu, 1.2% sulfur by weight flash point 100 deg. F minimum Used oil which does not meet the specifications above for on-spec used oil shall not be burned in the Boiler. Indeck Energy must contact the New Hampshire Department of Environmental Services Waste Management Division for alternative options.		
4.	PC1-Multiclone	Periodic Monitoring (Total Suspended Particulate Control)	a. Conduct monitoring of pressure differential across the PC1 - Multiclone unit every two hours. An acceptable pressure differential shall be in accordance with standard operating practices and manufacturer's recommended operating parameters, and shall be maintained between 3 and 7 inches of water column. Pressure differential readings shall be recorded on standard forms and kept on file at the facility for review by the DES upon request. The standard forms shall include the acceptable operating parameters for quick reference by facility personnel. b. Facility personnel shall conduct a daily inspection for visible emissions of the PC1 - Multiclone unit to observe leaks using EPA Method 22, 40 CFR Part 60, Appendix A. If a leak(s) is observed, facility personnel shall take immediate steps to repair the leak(s). Daily observations, maintenance, and repairs performed on the unit shall be recorded in the log book. c. During down-time maintenance periods, facility personnel shall inspect inlet and outlet vanes and boots for any build up of caked dust. All caked dust shall be removed during each down-time maintenance period. d. Observations of operating parameters outside of the standard operating practices included in this permit shall be recorded, investigated, and corrected immediately. If this results in	Every 2 hours and as specified	Env-A 806.01(4) and 40 CFR 70.6(a)(3) Federally Enforceable

Table 6 - Monitoring/Testing Requirements					
			a permit limit exceedance, Indeck personnel shall contact the DES within 8 hours in accordance with Section XXVIII. of this permit.		
5.	PC2-ESP	Periodic Monitoring (Total Suspended Particulate Control)	In accordance with Indeck's O&M manual and standard operating practices for this equipment, on a bi-hourly basis, facility personnel shall: i. Check and record the primary voltage and pressure drop readings on the PC2 - ESP. The primary voltage shall be maintained between 45 and 55 kva and the pressure drop across the PC2-ESP shall be maintained between 0 and 2 inches of water column. Voltage or pressure drop readings outside these ranges indicate a malfunction with the PC2- ESP and the operator shall correct the malfunction immediately. ii. The facility operator shall respond to all equipment alarms immediately. iii. Bi-hourly monitoring data shall be recorded daily on standard forms and kept on file at the facility for review by the DES upon request. The standard forms shall include the acceptable operating parameters for quick reference by facility personnel. iv. Observations of operating parameters outside of the standard operating practices included in this permit shall be recorded, investigated, and corrected immediately. If this results in a permit limit exceedance, Indeck personnel shall contact the DES within 8 hours in accordance with Section XXVIII. of this permit. Daily Monitoring/Testing Requirements i. The PC2-ESP shall be inspected at least once each shift. The casing, piping, and ducts shall be inspected for leaks, abnormal noise, hot spots, and fires. Local instrumentation shall be monitored for normal values. The local control panel shall be monitored for proper indication of normal values and alarms. ii. Observations of operating parameters outside of the standard operating practices included in this permit shall be recorded, investigated, and corrected immediately. If this results in a permit limit exceedance, Indeck personnel shall contact the DES within 8 hours in accordance with Section XXVIII. of this permit.	Every 2 hours and daily as specified	Env-A 806.01(4) and 40 CFR 70.6(a)(3) Federally Enforceable

Table 6 - Monitoring/Testing Requirements					
6.	Boiler	CEM Requirements	Indeck shall install, maintain, and operate the following CEM systems in the EU1-Boiler exhaust piping: 1. Opacity CEM The opacity CEM system shall meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1 and Env-A 805 (rule effective 11/15/92). Determination of compliance with the opacity limits established Sections VIII.A. and VIII.B. in this permit shall be made by the plant opacity CEM or visible emission readings taken once per shift following the procedures specified in 40 CFR Part 60, Appendix A, Method 9. Calculations shall be performed as specified below in subitem 7. Calculations. 2. NO_x CEM The NO_x CEM shall meet the requirements of 40 CFR Part 60, Appendix B , Performance Specification 2 and Env-A 805 (rule effective 11/15/92). Determination of compliance with the NO_x emission limits established in Section VIII.B. of this permit shall be made by the plant NO_x CEM. The NO_x emission rate shall be calculated daily as the average of the calendar day averages as calculated on the plant NO_x CEM. Calculations shall be performed as specified in subitem 7. Calculations. 3. CO CEM The CO CEM system shall meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 4 and Env-A 805 (rule effective 11/15/92). Determination of compliance with the CO emission limits established in Section VIII.B. of this permit shall be made by the plant CO CEM. The CO emission rate shall be calculated daily as the average of the calendar day averages as calculated on the plant CO CEM. Calculations shall be performed as specified in subitem 7. Calculations. 4. Carbon Dioxide (CO_2) or Oxygen (O_2) CEM The CO_2 or O_2 CEM system shall meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 3 and Env-A 805 (rule effective 11/15/92).	As specified	Env-A 805.02 & 40 CFR Part 70.6(a)(3) Federally Enforceable
6.	Boiler	CEM Requirements (Continued)	5. Volumetric Flow CEM The stack volumetric flow measuring device shall meet all of the requirements of 40 CFR Part 60, Appendix B, Performance Specification 6. The stack flow monitor shall have an automatic blow-back purge	As specified	Env-A 805.02 & 40 CFR Part 70.6(a)(3) Federally

Table 6 - Monitoring/Testing Requirements					
			system installed and activated during all times of boiler operation. The stack volumetric flow measuring device combined with the concentration CEM equipment for CO and NO_x shall be used to calculate mass emission rates for comparison with the emission standard specified in permit conditions listed in Sections VIII.A. and VIII.B. The stack volumetric flow monitor shall also meet the following requirements: a. All differential pressure flow monitors shall have an automatic blow-back purge system installed, and in wet stack emissions shall have the capability for drainage of the sensing lines. b. The stack flow monitoring system shall have the capability for on-line manual transducer calibration and for a zero check. c. The stack flow monitoring system shall be capable of displaying the individual parameters used in the stack flow calculation. For example, a differential pressure monitoring system shall be able to display instantaneous values of differential pressure, stack temperature, and relevant constants used in the calculation which reflect the static pressure assumed, gas molecular weight assumed, and the pitot tube coefficient utilized. 6. Steam Flow CEM Indeck shall install, maintain, and operate a continuous steam flow rate monitoring/recording system which shall meet all applicable ASME specifications. Calibration of the steam flow transducer and inspection of the orifice plates shall occur at least once annually. If adequate straight length of piping is not available, then in lieu of a measuring system that meets ASME specifications, Indeck may use a steam flow rate monitoring system that can be calibrated by instruments installed, maintained, and calibrated per ASME specifications, or by other methods approved by the DES.		Enforceable
6.	Boiler	CEM Requirements (Continued)	7. Calculations: a. CEM calendar day averages shall be calculated as follows: i. Calendar Day average = (sum of all valid hourly lb/hr averages for the	As specified	Env-A 805.02 & 40 CFR Part 70.6(a)(3) Federally

Table 6 - Monitoring/Testing Requirements					
			calendar day)/(24 - hours of CEM system downtime for the day); ii. Calendar day averages shall only be valid for days with 18 or more valid hours of CEM data; iii. A valid hour of CEM data shall be defined as a minimum of 45 minutes collection of CEM readings taken in a calendar hour; and iv. Hours of CEM system downtime shall be defined as the number of calendar hours when the CEM system has not collected data or is out-of-control for greater than 15 minutes for any reason (i.e., audits, CEM system calibration, CEM system failures, etc.). b. CEM consecutive 365-day averages shall be calculated as follows: i. Consecutive 365-day average = (sum of all valid calendar day averages for the 365-day period)/(365 - days of CEM system downtime); and ii. Days of CEM system downtime shall be defined as the number of calendar days when the CEM system has collected less than 18 valid hours of CEM data. c. Hours or days when the CEM system has been intentionally shutdown when the facility is not operating shall not be counted as CEM system downtime. 8. Indeck shall be subject to all of the CEM requirements of Env-A 805 (rule effective 11/15/92) which shall include, but not be limited to: quarterly audit requirements, excess emission report requirements, quality control written procedure requirements for gaseous CEM monitors, and record keeping requirements. The specific record keeping and reporting requirements are described in Sections VIII.E. and VIII.F. of this permit.		Enforceable
6.	Boiler	CEM Requirements (Continued)	9. Indeck shall continuously monitor and record data from the gaseous CEM system during all periods of operation, including periods of startup, shutdown, malfunctions, or emergency conditions, except when the stack flow is less than 23,000 wet SCFM. The opacity CEM shall be continuously	As specified	Env-A 805.02 & 40 CFR Part 70.6(a)(3) Federally Enforceable

Table 6 - Monitoring/Testing Requirements					
			monitoring and recording data during all periods of operation, regardless of the stack flow rate. 10. Excess emissions indicated by the CEM system shall be considered violations of the applicable emission limit for purposes of this permit, except where Indeck can adequately demonstrate to the DES that the recorded exceedance resulted from a CEM malfunction.		
7.	Boiler	Periodic Monitoring Chip Testing	Indeck Energy shall collect a separate weekly composite chip sample from each supplier of C/D chips and each supplier of whole tree chips or sawmill residue chips from each delivery of such material. Indeck Energy shall then conduct testing to determine moisture content of the composite chip samples and record the results.	Weekly composite chip samples from each supplier	Env-A 806.01(4) & 40 CFR Part 70.6(a)(3) Federally Enforceable
8.	Boiler	Periodic Monitoring Chip Testing	Indeck Energy shall collect a separate monthly composite chip sample from each supplier of C/D chips and each supplier of whole tree chips or sawmill residue chips from each delivery of such material. Equal proportions from four successive weekly composite samples may be used for the monthly composite samples from each supplier. Indeck Energy, or a certified laboratory selected by Indeck Energy, shall conduct the following testing on composite samples: (A) Ultimate/proximate analysis including: 1. Heating value (Btu/lb) 2. Elemental analyses of the following expressed as a percent by weight: hydrogen total carbon ash fixed carbon sulfur volatiles nitrogen chlorine oxygen (by difference) alkalis as sodium oxide 3. Test methods to be used are ASTM Methods D3176, D3173, and D2361. (B) Elemental Metals Analysis - Determine the ppm by weight of the following: arsenic mercury barium selenium cadmium silver chromium lead copper nickel titanium zinc	Monthly composite chip samples from each supplier	Env-A 806.01(4) & 40 CFR Part 70.6(a)(3) Federally Enforceable

Table 6 - Monitoring/Testing Requirements					
			Each sample will be prepared in accordance with ASTM Part 05.05, Method D3683 and tested in a manner to give the appropriate results of total metal content. (C) Phenols - Phenols will be determined in ppm by weight concentration by USEPA Method 8270 (SW-846). (D) Toxicity Characteristic Leaching Procedure (TCLP) - TCLP will be run from ash generated at the testing laboratory from the above analyses in (A) 2. of composite samples for each of the following elements: arsenic mercury barium selenium cadmium silver chromium lead		
9.	Facility Wide	Fuel Sulfur Content Verification	The operator shall conduct testing using the appropriate ASTM method or retain certified delivery tickets provided by the supplier which contain sulfur content of the delivered fuel. Sulfur contents documented on delivery tickets shall be obtained using appropriate ASTM Methods. Copies of fuel oil delivery receipts provided by the supplier shall be retained for a period of five years for review by the DES, upon request.	For each delivery	Env-A 809 Federally Enforceable

VIII. E. Record keeping Requirements

The Permittee is subject to the Record keeping requirements as contained in Table 7 below:

Table 7 - Applicable Record keeping Requirements

Item #	Record keeping Requirement	Frequency of Record keeping	Applicable Emission Unit	Regulatory Cite Federally Enforceable or State-Only Enforceable
1.	The Permittee shall retain records of all required monitoring data, record keeping and reporting requirements, and support information for a period of at least 5 years from the date of the origination.	Retain for a minimum of 5 years	Facility Wide	40 CFR 70.6(a)(3)(ii)(B) Federally Enforceable
2.	The permittee shall maintain records of monitoring and testing as specified in Table 6 of this permit for: (A) Preventative maintenance and inspection results for stacks and fuel burning devices; (B) Initial boiler compliance test results; (C) Subsequent boiler performance test results; (D) Boiler fuel use records; (E) Used oil testing results; (F) Sulfur content in fuel verification for No. 2 fuel oil and used oil received; (G) Periodic monitoring data for pollution control equipment; and (H) Results of weekly and monthly chip testing required.	Maintain on a continuous basis as specified in Table 5 of this permit	Facility Wide	40 CFR 70.6(a)(3)(iii)(A) Federally Enforceable
3.	Delivery tickets from each fuel oil supplier for each shipment of No. 2 fuel oil and/or used oil received shall be kept on file in a form suitable for inspection and shall be made available to the DES and/or the EPA upon request. Each delivery ticket shall indicate the name, address, and telephone number of the fuel/used oil supplier, the quantity of fuel/used oil delivered, and the percent sulfur by weight of the fuel/used oil being delivered. If delivery tickets do not contain sulfur content of fuel being delivered, Indeck shall perform testing in accordance with appropriate ASTM test methods to determine compliance with the sulfur content limitation provisions in Env-A 1604.01(a) for liquid fuels.	Maintain on a continuous basis	Boiler	40 CFR 70.6(a)(3)(iii)(A) Federally Enforceable
4.	Daily, monthly, and 12 month rolling total records of on-spec used oil and No. 2 fuel oil used as fuel for the Boiler and the following: (A) Fuel consumption; (B) Fuel type; (C) Viscosity; (D) Sulfur content as percent sulfur by weight of fuel; and (E) Btu content per gallon.	Daily, monthly & consecutive 12 month rolling total of on-spec used oil consumption	Boiler	Env-A 901.03 Federally Enforceable
5.	Daily, monthly, and consecutive 12 month rolling totals of solid	Daily, monthly,	Boiler	Env-A 901.03

Table 7 - Applicable Record keeping Requirements				
	fuel utilization shall be kept at the facility and contain the following information for each fuel burning device: (A) Fuel consumption (tons); (B) Moisture content (weight percent); (C) Fuel type (whole tree chips, sawmill residue, C/D derived wood chips); and (D) Btu content (mmBtu/bone dry ton chips).	and consecutive 12 month rolling total of fuel consumption		Federally Enforceable
6.	Records shall be kept of the hours of operation of the Boiler.	Daily, monthly, and annual	Boiler	Env-A 901.03 Federally Enforceable
7.	Monthly records of fuel utilization & hours of operation for the emergency generator and twelve consecutive month rolling totals of fuel utilization & hours of operation for the emergency generator shall be kept at the facility and contain the following information: (A) Fuel consumption; (B) Fuel type; (C) Sulfur content as percent sulfur by weight of fuel; (D) Viscosity; and (E) Btu content per gallon of fuel.	Monthly & consecutive 12 month rolling totals	Emergency Generator	Env-A 901.03 Federally Enforceable
8.	NOX Record keeping Requirements: For fuel burning devices, including boilers and internal combustion engines, the following information shall be recorded and maintained: (A) Facility information, including: 1. Source name; 2. Source identification; 3. Physical address; 4. Mailing address; and (B) Identification of fuel burning device; (C) Operating schedule information for each fuel burning device identified in (B), above, including; 1. Days per calendar week during the normal operating schedule; 2. Hours per day during the normal operating schedule and for a typical ozone season day, if different from the normal operating schedule; and 3. Hours per year during the normal operating schedule; (D) Type, and amount of fuel burned, for each fuel burning device, during normal operating conditions and for a typical ozone season day, if different from normal operating conditions, on an hourly basis in million Btu's per hour; (E) The following NOX emission data, including records of total annual emissions, in tons per year, and typical ozone season day emissions, in pounds per day:	As specified	Facility Wide	Env-A 901.08 Federally Enforceable

Table 7 - Applicable Record keeping Requirements				
	1. Theoretical potential emissions for the calculation year for each fuel burning device; and 2. Actual NOX emissions for each fuel burning device.			
9.	CEM Record keeping Requirements: All data required to be collected by the continuous monitors as specified in the monitoring and testing section of the permit and covered under Env-A 805.	As specified	Boiler	Env-A 805 Federally Enforceable

VIII. F. Reporting Requirements

The Permittee is subject to the reporting requirements as contained in Table 8 below:

	Table 8 - Applicable Reporting Requirements			
Item #	Reporting Requirement	Frequency of Reporting	Applicable Emission Unit	Regulatory Cite Federally Enforceable or State-Only Enforceable
1.	NOx Reporting Requirements: For fuel burning devices and incinerators, including boilers, turbines and engines, as well as asphalt plant dryers and miscellaneous sources, the owner or operator shall submit to the director, annually (no later than April 15th of the following year), reports of the data required by Condition VIII.E., Table 7, Item 8., including total annual quantities of all NO_x emissions. The NOx emissions for the Boiler shall be generated from the NOx CEM Data acquisition system.	Annually (no later than April 15th of the following year)	Facility Wide	Env-A 901.09 Federally Enforceable
2.	The permittee shall annually submit to the director, an annual fuel usage report indicating monthly fuel usage with corresponding 12 consecutive month fuel usage totals for the Boiler. In addition, the permittee shall submit a summary report including test analyses for each load of used oil and No. 2 fuel oil received.	Annually (no later than April 15th of the following year)	Facility Wide	40 CFR 70.6 (a)(1) Federally Enforceable

	Table 8 - Applicable Reporting Requirements			
3.	The permittee shall submit an annual fuel usage report indicating monthly and rolling twelve consecutive month fuel utilization and consecutive 12 month rolling total hours of operation for the emergency generator.	Annually (no later than April 15th of the following year)	Emergency Generator	40 CFR 70.6 (a)(1) Federally Enforceable
4.	Prompt reporting of deviations from Permit requirements within 24 hours of such an occurance by phone or fax in accordance with Section XXVIII. of this Permit.	Prompt reporting (ie; within 24 hours of an occurrence).	Facility Wide	40 CFR 70.6(a)(3)(iii) (B) Federally Enforceable
5.	The Permittee shall submit to DES a summary report of monitoring and testing requirements every 6 months. All instances of deviations from Permit requirements must clearly be identified in such reports. All required reports must be certified by a responsible official consistent with section 70.5(d). The report shall contain a summary of the following information: (A) Preventative maintenance and inspection results for stacks and fuel burning devices; (B) Monitoring and preventative maintenance results for the Multiclone and ESP; (C) All instances of deviations from permit requirements shall be clearly identified; (D) Copies of any Initial Boiler Compliance Test results or subsequent Boiler Performance Test Results; (D) Summary report of fuel sulfur content verifications; (E) Summary report of used oil certified delivery receipts containing results of analyses conducted on used oil shipments received; (F) Summary report of weekly chip moisture test results; and (G) Summary report of monthly chip testing results.	Every 6 months by July 31st and January 31st of each calendar year.	Facility Wide	40 CFR 70.6(a)(3)(iii) (A) Federally Enforceable
6.	Indeck Energy shall submit to the DES excess emission reports for the CEM systems and the Boiler as approved by the DES containing information specified in Env-A 805 (rule effective 11/15/92) as well as the following information: (A) Calendar daily averages of NO_x and CO emissions in lb/hr and part per million (ppm) dry, whether or not an excess emission has occurred; (B) Calendar daily averages of percentage oxygen (O_2) on a dry basis or carbon dioxide (CO_2) on a wet basis; (C) Calendar daily averages of steam generation rate; (D) Calendar daily averages of stack flow (dscfm); (E) Average steam production rate for each consecutive 24-	Within 30 days of the close of each calendar quarter	Boiler	Env-A 805 Federally Enforceable

	Table 8 - Applicable Reporting Requirements			
	hour period where the production rate exceeds any of the limits set forth in Section VIII.A. of this permit; (F) CEM system availability data; (G) Estimated amount in tons (wet basis) of raw wood chip and C/D fuel consumption per month and a consecutive twelve month total; (H) Amount in gallons of fuel consumption per calendar month where the fuel usage cap set forth in Section VIII.A. or VIII.B. of this permit has been exceeded; and (I) All periods of gaseous and opacity exceedances including start time, end time, and magnitude and cause of the exceedance.			
7.	Indeck shall submit to the DES a CEM audit report for all audits conducted as specified in Env-A 805.06 (rule effective 11/15/92) and Section VIII.D., Item 7. of this permit.	Within 30 days of the close of each calendar quarter	Boiler	Env-A 805.06 Federally Enforceable
8.	Any report submitted to the DES and/or EPA shall include the compliance certification statement as outlined in Section XXI.B. of this Permit and shall be signed by the responsible official.	As specified	Facility Wide	40 CFR 70.6(c)(1) Federally Enforceable
9.	Annual reporting and payment of emission based fees shall be conducted in accordance with Section XXIII. of this Permit.	As specified in Section XXIII.	Facility Wide	Env-A 704.03 Federally Enforceable
10.	Annual compliance certification shall be submitted in accordance with Section XXI. of this Permit.	April 15th	Facility Wide	40 CFR 70.6(c)(1) Federally Enforceable

IX. Requirements Currently Not Applicable:

Indeck Energy did not request that any non-applicable requirements be specifically listed in this permit.

General Title V Operating Permit Conditions

X. Issuance of a Title V Operating Permit:

A. This Permit is issued in accordance with the provisions of Part Env-A 609. In accordance with 40 CFR 70.6(a)(2) this Permit shall expire on the date specified on the cover page of this Permit, which shall not be later than the date five (5) years after issuance of this Permit.

Permit expiration terminates the Permittee's right to operate the Permittee's emission units, control equipment, or associated equipment covered by this permit, unless a timely and complete

renewal application is submitted at least 6 months before the expiration date.

B. Pursuant to Env-A 609.02(b), this Permit shall be a state permit to operate as defined in RSA 125-C:11, III.

XI. Title V Operating Permit Renewal Procedures:

Pursuant to Env-A 609.06(b), an application for renewal of this Permit shall be considered timely if it is submitted to the Director at least six months prior to the designated expiration date of this Permit.

XII. Application Shield:

Pursuant to Env-A 609.07, if an applicant submits a timely and complete application for the issuance or renewal of a Permit, the failure to have a Permit shall not be considered a violation of this part until the Director takes final action on the application.

XIII. Permit Shield:

A. Pursuant to Env-A 609.08(a), a permit shield shall provide that:

1. For any applicable requirement or any state requirement found in the New Hampshire Rules Governing the Control of Air Pollution specifically included in this Permit, compliance with the conditions of this Permit shall be deemed in compliance with said applicable requirement or said state requirement as of the date of permit issuance; and

2. For any potential applicable requirement or any potential state requirement found in the New Hampshire Rules Governing the Control of Air Pollution specifically identified in this Title V Operating Permit as not applicable to the stationary source or area source, the Permittee need not comply with the specifically identified federal or state requirements.

B. The permit shield identified in Section XIII.A. of this Permit shall apply only to those conditions incorporated into this Permit in accordance with the provisions of Env-A 609.08(b). It shall not apply to certain conditions as specified in Env-A 609.08(c) that may be incorporated into this Permit following permit issuance by the DES.

C. If a Title V Operating Permit and amendments thereto issued by the DES does not expressly include or exclude an applicable requirement or a state requirement found in the New Hampshire Rules Governing the Control of Air Pollution, that applicable requirement or state requirement shall not be covered by the permit shield and the Permittee shall comply with the provisions of said requirement to the extent that it applies to the Permittee.

D. If the DES determines that this Title V Operating Permit was issued based upon inaccurate or incomplete information provided by the applicant or Permittee, any permit shield provisions in said Title V Operating Permit shall be void as to the portions of said Title V Operating Permit which are affected, directly or indirectly, by the inaccurate or incomplete information.

E. Pursuant to Env-A 609.08(f), nothing contained in Section XIII. of this Permit shall alter or affect the ability of the DES to reopen this Permit for cause in accordance with Env-A 609.18 or to exercise its summary abatement authority.

F. Pursuant to Env-A 609.08(g), nothing contained in Section XIII. of this Permit or in any Title V operating permit issued by the DES shall alter or affect the following:

1. The ability of the DES to order abatement requiring immediate compliance with applicable requirements upon finding that there is an imminent and substantial endangerment to public health, welfare, or the environment;

2. The state of New Hampshire's ability to bring an enforcement action pursuant to RSA 125-C:15,II;

3. The provisions of Section 303 of the Act regarding emergency orders including the authority of the EPA Administrator under that section;

4. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

5. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act;

6. The ability of the DES or the EPA Administrator to obtain information about a stationary source, area source, or device from the owner or operator pursuant to Section 114 of the Act; or

7. The ability of the DES or the EPA Administrator to enter, inspect, and/or monitor a stationary source, area source, or device.

XIV. Reopening for Cause:

The Director shall reopen and revise a Title V Operating Permit for cause if any of the circumstances contained in Env-A 609.18(a) exist. In all proceedings to reopen and reissue a Title V Operating Permit, the Director shall follow the provisions specified in Env-A 609.18(b) through (g).

XV. Administrative Permit Amendments:

A. Pursuant to Env-A 612.01, the Permittee may implement the changes addressed in the request for an administrative permit amendment, as defined in Part Env-A 100, immediately upon submittal of the request.

B. Pursuant to Env-A 612.01, the Director shall take final action on a request for an administrative permit amendment in accordance with the provisions of Env-A 612.01(b) and (c).

XVI. Operational Flexibility:

A. Pursuant to Env-A 612.02(a), the Permittee subject to and operating under this Title V Operating Permit may make changes involving trading of emissions under this existing Title V Operating Permit at the permitted stationary source or area source without filing a Title V Operating Permit application for and obtaining an amended Title V Operating Permit, provided that all the conditions are met as specified in Sections XVI.A. 1. through 7. of this permit and a notice is submitted to the DES and the EPA describing the intended changes. The DES has not included any permit terms authorizing intra- or inter-facility emissions trading in this permit.

1. The change is not a modification under any provision of Title I of the Act;

2. The change does not cause emissions to exceed the emissions allowable under the Title V operating permit, whether expressed therein as a rate of emissions or in terms of total emissions;

3. The owner or operator has obtained any temporary permit required by Env-A 600;

4. The owner or operator has provided written notification to the director and administrator at least 15 days prior to the proposed change, and such written notification includes:

   a. The date on which each proposed change will occur;

   b. A description of each such change;

   c. Any change in emissions that will result and how this change in emissions will comply with the terms and conditions of the permit;

   d. A written request that the operational flexibility procedures be used; and

   e. The signature of the responsible official, consistent with Env-A 605.04(b);

5. The Title V operating permit issued to the stationary source or area source already contains terms and conditions including all terms and conditions which determine compliance required under 40 CFR 70.6(a) and (c) and which allow for the trading of emissions increases and decreases at the permitted stationary source or area source solely for the purpose of complying with a federally-enforceable emissions cap that is established in the permit independent of otherwise applicable requirements;

6. The owner or operator has included in the application for the Title V operating permit proposed replicable procedures and proposed permit terms which ensure that the emissions trades are quantifiable and federally enforceable for changes to the Title V operating permit which qualify under a federally-enforceable emissions cap that is established in the Title V operating permit independent of the otherwise applicable requirements; and

7. The proposed change complies with Env-A 612.02 (e).

B. Pursuant to Env-A 612.02(c), the Permittee subject to and operating under this Title V Operating Permit may make changes not addressed or prohibited by this existing Title V Operating Permit at the permitted stationary source or area source without filing a Title V Operating Permit application, provided that all the conditions specified in Env-A 612.02(c)(1) through (6) are met and a notice is submitted to the DES and the EPA describing the intended changes.

If Indeck Energy would like to use C/D chips from a new supplier (not ERRCO), Indeck Energy must submit a notification prior to such changes in accordance with Env-A 612.02(c) and attach such off-permit change to its current Title V Operating Permit. In addition, Indeck Energy will conduct periodic monitoring and testing of C/D chips from the new supplier as outlined in the Monitoring/Testing Requirements of this Title V Operating Permit.

C. Pursuant to Env-A 612.02(d), the Permittee, Operator, Director, and Administrator shall attach each notice of an off-permit change completed in accordance with Section XVI. of this Title V Operating Permit to their copy of the current Title V Operating Permit.

D. Pursuant to Env-A 612.02(e), any change under Section XVI. shall not exceed any emissions limitations established under the New Hampshire Rules Governing the Control of Air Pollution, or result in an increase in emissions, or result in new emissions of any toxic air pollutant or hazardous air pollutant other than those listed in the existing Permit.

E. Pursuant to Env-A 612.02(f), the off-permit change shall not qualify for the permit shield under Env-A 609.08.

XVII. Minor Permit Amendments:

A. Pursuant to Env-A 612.04 prior to implementing a minor permit modification, the Permittee shall submit a written request to the Director in accordance with the requirements of Env-A 612.04(b).

B. The Director shall take final action on the minor permit amendment request in accordance with the provisions of Env-A 612.04(c) through (g).

C. Pursuant to Env-A 612.04(g), the permit shield specified in Env-A 609.08 shall not apply to minor permit amendments under Section XVII. of this Permit.

D. Pursuant to Env-A 612.04(i), the Permittee shall be subject to the provisions of Part Env-A 614 and Part Env-A 615 if the change is made prior to the filing with the Director a request for a minor permit amendment.

XVIII. Significant Permit Amendments:

A. Pursuant to Env-A 612.05, a change at the facility shall qualify as a significant permit amendment if it meets the criteria specified in Env-A 612.05(a)(1) through (7).

B. Prior to implementing the significant permit amendment, the Permittee shall submit a written request to the Director and to the EPA which includes all the information as referenced in Env-A 612.05(b) and (c) and shall be issued an amended Title V Operating Permit from the DES. The Permittee shall be subject to the provisions of Env-A 614 and Env-A 615 if a request for a significant permit amendment is not filed with the Director and/or the change is made prior to the issuance of an amended Title V Operating Permit.

C. The Director shall take final action on the significant permit amendment in accordance with the procedures specified in Env-A 612.05(d), (e) and (f).

XIX. Title V Operating Permit Suspension, Revocation, or Nullification:

A. Pursuant to RSA 125-C:13, the Director may suspend or revoke any final permit issued hereunder if, following a hearing, the Director determines that:

1. the Permittee has committed a violation of any applicable statute or state requirement found in the New Hampshire Rules Governing the Control of Air Pollution, order, or permit condition in force and applicable to it; or

2. that the emissions from any device to which this Permit applies, alone or in conjunction with other sources of the same pollutants, presents an immediate danger to the public health.

B. The Director shall nullify any Permit, if following a hearing in accordance with RSA 541-A:30, II, a finding is made that the Permit was issued in whole or in part based upon any information proven to be intentionally false or misleading.

XX. Inspection and Entry:

Pursuant to Env-A 614.01, EPA and DES personnel shall be granted access to the facility covered by this Permit, in accordance with RSA 125-C:6, VII for the purposes of: inspecting the proposed or permitted site; investigating a complaint; and assuring compliance with any applicable requirement or state requirement found in the New Hampshire Rules Governing the Control of Air Pollution and/or conditions of any Permit issued pursuant to Chapter Env-A 600.

XXI. Certifications:

A. Compliance Certification Report

In accordance with 40 CFR 70.6(c) the Responsible Official shall certify, annually from the date of issuance, that the facility is in compliance with the requirements of this permit. The report shall be submitted to the DES and to the Regional Administrator, U.S. Environmental Protection Agency - New England Region. The report shall be submitted in compliance with the submission requirements below.

In accordance with 40 CFR 70.6(c)(5), the report shall describe:

1. The terms and conditions of the Permit that are the basis of the certification;

2. The current compliance status of the source with respect to the terms and conditions of this Permit, and whether compliance was continuous or intermittent during the reporting period;

3. The methods used for determining compliance, including a description of the monitoring, Record keeping and reporting requirements, and test methods; and

4. Any additional information required by the DES to determine the compliance status of the source.

B. Certification of Accuracy Statement

All documents submitted to the DES shall contain a certification of accuracy statement by the responsible official of truth, accuracy, and completeness. Such certification shall be in accordance with the requirements of 40 CFR 70.5(d) and contain the following language:

> "I am authorized to make this submission on behalf of the facility for which the submission is made. Based on information and belief formed after reasonable inquiry, I certify that the statements and information in the enclosed documents are, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

All reports submitted to the DES (except those submitted as emission based fees as outlined in Section XXV. of this permit) shall be submitted to the following address:

New Hampshire Department of Environmental Services
Air Resources Division
6 Hazen Drive
P.O. Box 95
Concord, NH 03302-0095
Attn: Compliance Bureau

XXII. Enforcement:

Any noncompliance with a permit condition constitutes a violation of RSA 125-C:15, and, as to the conditions in this permit which are federally enforceable, a violation of the Clean Air Act, 42 U.S.C. Section 7401 et seq., and is grounds for enforcement action, for permit termination or revocation, or for denial of an operating permit renewal application by the DES and/or the EPA. Noncompliance may also be grounds for assessment of administrative, civil, or criminal penalties in accordance with RSA 125-

C:15 and/or the Clean Air Act. This Permit does not relieve the Permittee from the obligation to comply with any other provisions of RSA 125-C, the New Hampshire Rules Governing the Control of Air Pollution, or the Clean Air Act, or to obtain any other necessary authorizations from other governmental agencies, or to comply with all other applicable Federal, State, or Local rules and regulations not addressed in this Permit.

In accordance with 40 CFR 70.6 (a)(6)(ii) a Permittee shall not claim as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit.

XXIII. <u>Emission-Based Fee Requirements</u>:

A. The Permittee shall pay an emission-based fee annually for this facility as calculated each calendar year pursuant to Env-A 704.03.

B. The Permittee shall determine the total actual annual emissions from the facility to be included in the emission-based multiplier specified in Env-A 704.03(a) for each calendar year in accordance with the methods specified in Env-A 620.

C. The Permittee shall calculate the annual emission-based fee for each calendar year in accordance with the procedures specified in Env-A 704.03 and the following equation:

$$FEE = E * DPT * CPIm * ISF$$

Where:

FEE = The annual emission-based fee for each calendar year as specified in Env-A 704.
E = The emission-based multiplier is based on the calculation of total annual emissions as specified in Env-A 704.02 and the provisions specified in Env-A 704.03(a).
DPT = The dollar per ton fee the DES has specified in Env-A 704.03(b).
CPIm = The Consumer Price Index Multiplier as calculated in Env-A 704.03(c).
ISF = The Inventory Stabilization Factor as specified in Env-A 704.03(d).

D. The Permittee shall contact the DES each calendar year for the value of the Inventory Stabilization Factor.

E. The Permittee shall contact the DES each calendar year for the value of the Consumer Price Index Multiplier.

F. The Permittee shall submit, to the DES, payment of the emission-based fee and a summary of the calculations referenced in Sections XXIII.B. and C. of this Permit for each calendar year by October 15th of the following calendar year in accordance with Env-A 704.04.

The emission-based fee and summary of the calculations shall be submitted to the following address:

New Hampshire Department of Environmental Services
Air Resources Division
6 Hazen Drive
P.O. Box 95
Concord, NH 03302-0095
ATTN: Emissions Inventory

G. The DES shall notify the Permittee of any under payments or over payments of the annual emission-based fee in accordance with Env-A 704.05.

XXIV. Duty To Provide Information:

In accordance with 40 CFR 70.6 (a)(6)(v), upon the DES's written request, the Permittee shall furnish, within a reasonable time, any information necessary for determining whether cause exists for modifying, revoking and reissuing, or terminating the Permit, or to determine compliance with the Permit. Upon request, the Permittee shall furnish to the DES copies of records that the Permittee is required to retain by this Permit. The Permittee may make a claim of confidentiality as to any information submitted pursuant to this condition in accordance with Part Env-A 103 at the time such information is submitted to the DES. The DES shall evaluate such requests in accordance with the provisions of Part Env-A 103.

XXV. Property Rights:

Pursuant to 40 CFR 70.6 (a)(6)(iv), this Permit does not convey any property rights of any sort, or any exclusive privilege.

XXVI. Severability Clause:

Pursuant to 40 CFR 70.6 (a)(5), the provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstances is held invalid, the application of such provision to other circumstances, and the remainder of this Permit, shall not be affected thereby.

XXVII. Emergency Conditions:

Pursuant to 40 CFR 70.6 (g), the Permittee shall be shielded from enforcement action brought for noncompliance with technology based[4] emission limitations specified in this Permit as a result of an emergency[5]. In order to use emergency as an affirmative defense to an action brought for

[4] Technology based emission limits are those established on the basis of emission reductions achievable with various control measures or process changes (e.g., a new source performance standard) rather than those established to attain health based air quality standards.

[5] An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation would require immediate corrective action to restore normal operation, and that causes the source to exceed a technology based limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by

noncompliance, the Permittee shall demonstrate the affirmative defense through properly signed, contemporaneous operating logs, or other relevant evidence that:

A. An emergency occurred and that the Permittee can identify the cause(s) of the emergency;

B. The permitted facility was at the time being properly operated; and

C. During the period of the emergency, the Permittee took all reasonable steps as expeditiously as possible, to minimize levels of emissions that exceeded the emissions standards, or other requirements in this Permit; and

D. The Permittee submitted notice of the emergency to the DES within two (2) business days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emission, and corrective actions taken.

XXVIII. Permit Deviation:

In accordance with 40 CFR 70.6(a)(3)(iii)(B), the Permittee shall report to the DES all instances of deviations from Permit requirements, by telephone or fax, within 24 hours of discovery of such deviation. This report shall include the deviation itself, including those attributable to upset conditions as defined in the Permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. Said Permit deviation shall also be submitted in writing to the DES, at the address listed in permit condition XXI.A. in the semi-annual report of monitoring and testing requirements due January 31st and July 31st of each calendar year. Deviations are instances where any Permit condition is violated and has not already been reported as an emergency pursuant to Section XXVII. of this Permit.

Reporting a Permit deviation is not an affirmative defense for action brought for noncompliance.

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improperly designed equipment, lack of preventive maintenance, careless or improper operations, operator error or decision to keep operating despite knowledge of any of these things.